Influenza and pertussis immunisation in pregnant women – a retrospective document audit

Caris House¹ and Ramya Raman² ¹Medical Student, University of Notre Dame, Fremantle, WA ²Clinical Audit Supervisor, General Practitioner, WA

Background: Antenatal influenza and pertussis immunisation reduces morbidity and mortality outcomes for both the mother and infant^{1,2.} Current recommendations are that for each pregnancy; the pertussis immunisation is to be administered after 28 weeks gestation and the influenza immunisation at any time in the antenatal period³.

Aim: To identify the proportion of pregnant women who had influenza and/or pertussis immunisations recorded on their medical record at an outer metropolitan general practice clinic. Furthermore to determine if these immunisations were given at the recommended gestational time.

Methods: A random sample of 55 pregnant women, who carried >37 weeks gestation, and who were registered to the general practice in the year of 2017, had their medical records reviewed. Their immunisation status and corresponding date were recorded utilising an effective piloted data collection tool and dictionary. The main outcome measures were presence/absence of receiving the immunisation compared with current Australian Immunisation Handbook Recommendations, calculated as direct proportions.

Results: 32.7% (n=18) of the cases reviewed had received both of the immunisations during the antenatal period. More patients 49% (n=27) received the pertussis immunisation when compared to influenza; 45.45% (n=25). Pertussis immunisation was given at the current recommended gestation period in all but one of the cases.

Conclusions: This audit did not meet the current standard for antenatal immunisation, although results are comparable with local, state and international reviews^{4,5}. Improvements at this facility are required largely in relation to use of the documentation and functions within the electronic database. A re-audit is encouraged following an educational session for key stakeholders.

References:

 Bergin, N., Murtagh, J., & Philip, R. K. (2018). Maternal vaccination as an essential component of life-course immunization and its contribution to preventive neonatology. International Journal of Environmental Research and Public Health, 15(5), 847. doi:10.3390/ijerph15050847
Kuhnt, J., & Vollmer, S. (2017). Antenatal care services and its implications for vital and health outcomes of children: evidence from 193 surveys in 69 low-income and middle-income countries. British Medical Journal Open, 7(11), 217-222. doi: 10.1136/bmjopen-2017-017122
The Centre for Disease Control and Prevention (2016). Pregnancy and Vaccination Vaccines for Pregnant Women. Retrieved from https://www.cdc.gov/vaccines/pregnancy/pregnantwomen/index.html. 4. Taksdal, S., Mak, D., Joyce, S., Tomlin, S., Carcione, D., Armstrong, P., Effler, P.

(2013). Predictors of uptake of influenza vaccination: A survey of pregnant women in Western

Australia [online]. Australian Family Physician, 42(8), 582-586. Retrieved from https://search-informitcom au.ipacez.nd.edu.au/documentSummary;dn=488242301893490

5. Wiley, K. E., Kerrie, E., Massey, P. D., Cooper, S. C., Wood, N. J., ho, J., Quinn, H.

E., & Leask, J. (2013). Uptake of influenza vaccine by pregnant women: a cross-sectional survey. The Medical Journal of Australia, 198 (7), 373-375. doi: 10.5694/mja12.11849